

REMARKS

Claims 1-5, 8-11, 13-14, 16 and 18-19 are pending in the present case. Claims 1, 9 and 14 are independent. Claims 12, 17, and 20 were withdrawn from consideration by the Examiner. Claims 6-7 and 15 were cancelled by Applicants. Claims 1, 9 and 14 are amended herein. Applicants respectfully request continuing examination in view of the above amendments to the present application, and the arguments set forth below. No new matter is added herein.

OBJECTIONS TO THE SPECIFICATION

The specification is objected to. The specification is amended herein. As amended herein, the following paragraph is added to the specification beginning with line 13 at page 13:

As shown in Figures 2, 3 and 4, blocks 503 and 504 allow process 500 to provide a method for removing heat from an electronic component that includes directing multiple flow streams of a fluid medium (e.g., air) in unique directions with respect to each other towards first ends of at least two sets of multiple fins of an appurtenance coupled to a heat sink and disposed to conduct heat from the electronic component. These directions change within the substantially even spaces between the fins towards a second end of the sets of fins, which is opposite from the first end. As shown in Figures 2, 3 and 4, the flow streams receive motive force from multiple fans, comprising as they do the discharges of the fans, which are disposed and direct their discharges in the unique directions substantially horizontally with respect to the first end of the fins and into the spaces between them.

No new matter is added. Applicants respectfully assert that, as amended herein, the specification comports with 37 CFR § 1.75(d)(1) and MPEP § 608.01(o) in providing antecedent basis for claimed subject matter. Applicants respectfully request the Examiner's review and approval.

CLAIM REJECTIONS

35 USC § 112 ¶ 1

Claims 1-5, 8-11, 13-14, 16 and 18-19 are rejected under

35 USC § 112 (¶ 1). The specification is amended herein as shown above.

Applicants respectfully assert that, as amended herein, the specification provides a sufficient description of the claimed embodiments under 37 CFR § 1.74(d)(1) and MPEP § 608.01(o). Thus, Applicants respectfully assert that Claims 1-5, 8-11, 13-14, 16 and 18-19 comply with 35 USC § 112 (¶1).

35 USC § 112 ¶ 2

Claims 1-5, 8-11, 13-14, 16 and 18-19 are rejected under 35 USC § 112 (¶ 2). The Examiner alleges that the claimed subject matter of a plurality of fans disposed and directing their discharges in unique directions substantially horizontally with respect to the first end of the cooling fins appears to contradict the original disclosure. Applicants respectfully call the attention of the Examiner to the first paragraph at page 9 of the specification, as originally filed. The sentence beginning with line 6 of that paragraph reads as follows, with underlining added for emphasis:

While Figure 2 depicts a view directed towards the top surface of the fins 215, it is appreciated that cooling configuration 200 can be mounted within a system, enclosure, or upon a circuit board or other structure in any orientation, such that the upper surface of fins 215 may be directed in any position (e.g., up, down, sideward, etc.) with respect to the system, etc.

Applicants respectfully assert that the specification as originally filed effectively thus describes the substantially horizontal disposition of the fans and their respective discharges with respect to the first end of the cooling fins.

Further, this orientation is implicitly extensible to Figures 3 and 4. The description of Figure 3 in the original specification begins with line 15 at page 10 and reads as follows:

The fans providing locomotion to the cooling medium do not have to be orthogonal to each other, as depicted in Figure 2. With reference to Figure 3, a cooling configuration 300 is depicted, according to one embodiment of the present invention. Advantageously, such an arrangement can allow more

internal design and spatial flexibility. In cooling configuration 300, the discharge of fans 311 and 312 provide flow streams of cooling air 316 and 317, respectively, which approach a heat sink 314 of an electronic component to be cooled from an acute angle with respect to each other. As flow streams 316 and 317 impinge cooling fins 315 and flow through the spaces between them, the air comprising the flow streams is warmed, removing heat from heat sink 314 by forced convection.

The description of Figure 4 in the original specification begins with line 6 at page 11 and reads as follows:

In one embodiment of the present invention, the fins are not planar in shape and are not affixed parallel to each other on the finned appurtenance. This can advantageously take advantage of the airflow directions and duct more airflow over the heatsink to better cool its designated electronic component. For instance, Figure 4 depicts a cooling configuration 400.

Applicants respectfully assert that Figure 2's "view directed towards the top surface of the fins" is not altered or changed by any of the description of Figures 3 and 4 that follows the respective excerpts above.

Thus, Applicants respectfully assert that the specification effectively describes the substantially horizontal disposition of the fans and their respective discharges with respect to the first end of the cooling fins. Applicants respectfully assert therefore that Claims 1-5, 8-11, 13-14, 16 and 18-19 comply with 35 USC § 112 (¶ 2).

CONCLUSION

By the rationale stated above, Applicants respectfully assert that the specification complies with 37 CFR § 1.75(d)(1) and MPEP § 608.01(o) and that Claims 1-5, 8-11, 13-14, 16 and 18-19 are allowable under 35 USC 112 (¶¶ 1, 2).

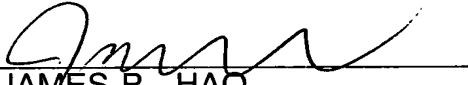
Accordingly, Applicant respectfully request that the rejection of Claims 1-5, 8-11, 13-14, 16 and 18-19 under 35 USC § 112 (¶¶ 1, 2) be withdrawn and that Claims 1-5, 8-11, 13-14, 16 and 18-19 be allowed.

Please charge deposit account No. 08-2025 for any unpaid fees.

Respectfully submitted,

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Dated: 1/18, 2006


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